

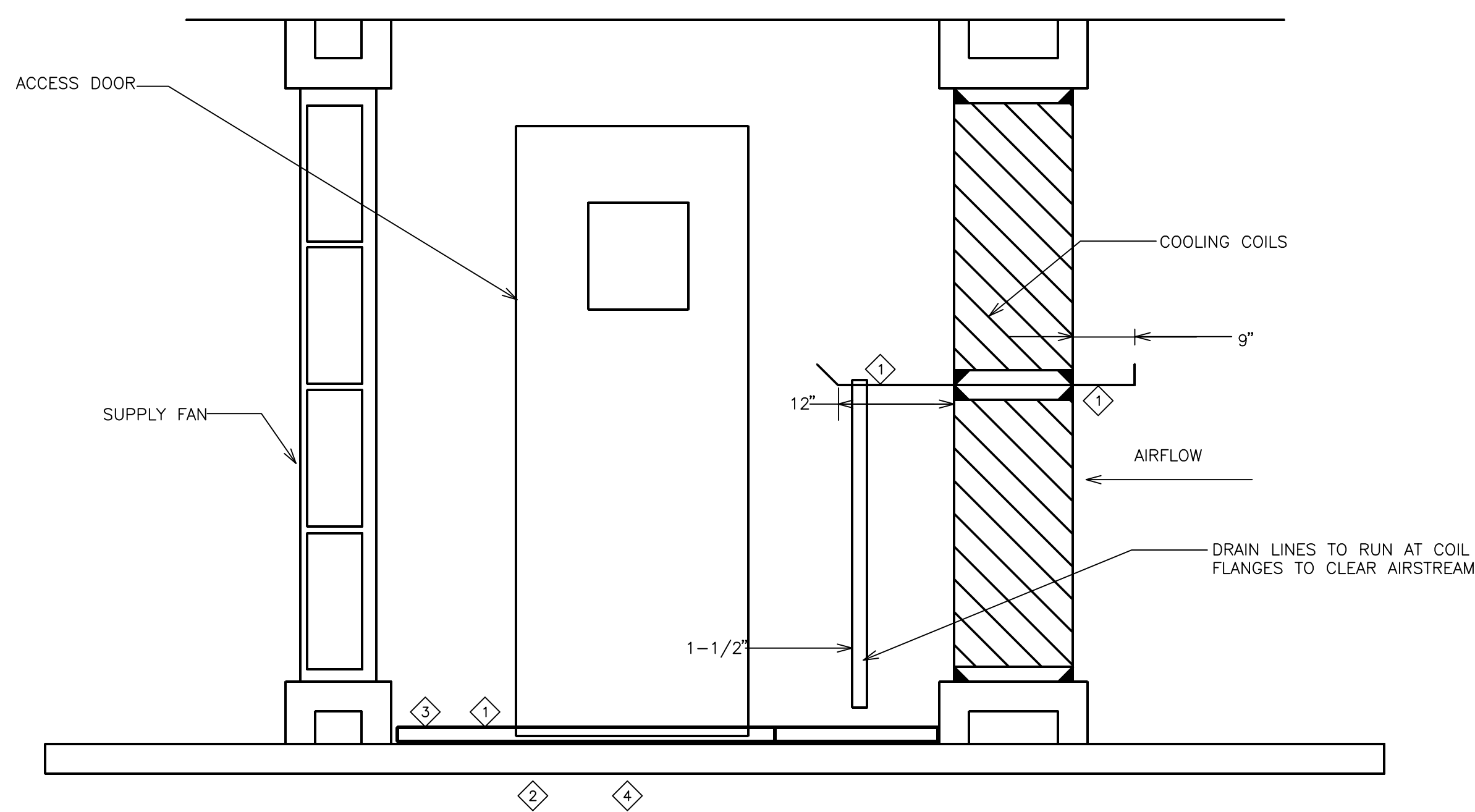
- GENERAL NOTES:**
- A. WORK ASSOCIATED WITH THIS DRAWING TO BE PRICED AND IDENTIFIED AS BASE DESIGN. THE FOLLOWING WORK MUST BE PERFORMED DURING SHUTDOWNS BETWEEN THE FOLLOWING TIMES. UNDER NO CIRCUMSTANCES SHALL THE UNIT OR ANY SYSTEMS BE AFFECTED BEYOND THIS SHUTDOWN TIME PERIOD.
- FRIDAY AT 5PM THROUGH MONDAY AT 5AM. WORKERS CAN WORK AROUND THE CLOCK IF NECESSARY. THIS INCLUDES FINAL BALANCING AND CONNECTION TO EXISTING BAS.
- THE FOLLOWING IS A PROPOSED BREAKOUT OF WORK TO BE COMPLETED DURING NORMAL BUSINESS HOURS AS THIS WORK DOES NOT AFFECT THE OPERATION OF THE EXISTING SYSTEM.
1. NEW CHILLED WATER MAINS, SPECIALTIES, CONTROL VALVE— DO NOT CONNECT TO EXISTING.
 2. NEW ELECTRICAL CONDUIT ROUTING— DO NOT CONNECT TO EXISTING.
 3. NEW STEAM AND CONDENSATE PIPING MAINS— DO NOT CONNECT TO EXISTING.
 4. OTHER MISCELLANEOUS WORK NOT AFFECTING CURRENT OPERATION OF APPLICABLE SYSTEMS
- THE FOLLOWING IS A PROPOSED BREAKOUT OF WORK TO BE COMPLETED DURING EACH SHUTDOWN
- SHUTDOWN #1
1. SHUTDOWN #1 TO OCCUR WHEN MECHANICAL COOLING IS NOT REQUIRED.
 2. AHU DOOR MODIFICATIONS
 3. REMOVE COOLING COIL SECTION WITHIN AHU. PATCH ORIGINAL COOLING COIL PIPING AHU PENETRATIONS.
 4. REMOVE SOUND ATTENUATING DEVICE AND HUMIDIFIER
 5. INSTALL NEW SUPPLY FAN ARRAY FRAME. PROVIDE AND SEAL AIR AND WATER TIGHT RIGID SOLID PANELS OVER EXISTING AHU PERFORATED PANELS. PROVIDE RIGID INSULATION WITHIN NEW SOLID PANEL TO PREVENT VIBRATION/OILCANNING OF NEW PANELS.
- SHUTDOWN #2
1. SHUTDOWN #2 TO OCCUR AS SOON AS POSSIBLE FOLLOWING SHUTDOWN #1. AS THIS SYSTEM WILL BE WITHOUT MECHANICAL COOLING FROM THE START OF SHUTDOWN #1 TO THE CONCLUSION OF SHUTDOWN #2.
 2. INSTALL AND ENABLE NEW SUPPLY FANS AND NEW VFD'S
 3. INSTALL NEW COOLING COIL, DRAIN PANS
 4. INSTALL NEW COOLING COIL CONDENSATE PIPING INSIDE AND OUTSIDE OF AHU AND DRAIN SYSTEM.
 5. REMOVE CHILLED WATER PIPING TO BE DEMOLISHED
 6. CONNECT NEW CHILLED WATER PIPING TO EXISTING MAIN AND TO NEW COOLING COILS
- SHUTDOWN #3
1. HOT TAP ISOLATION VALVE IF NECESSARY TO DEMOLISH IDENTIFIED PIPE AND TO KEEP OTHER EXISTING SYSTEMS IN OPERATION.
 2. INSTALL NEW HUMIDIFIER
 3. REMOVE STEAM AND CONDENSATE PIPING TO BE DEMOLISHED.
 4. CONNECT NEW STEAM AND CONDENSATE PIPING TO NEW HUMIDIFIER.
- SHUTDOWN #4
1. CONNECT EQUIPMENT TO EXISTING BAS
 2. BALANCE/ CALIBRATE EQUIPMENT AS NECESSARY

- KEY NOTES:**
1. EXISTING PRE-FILTER, ENERGY RECOVERY COIL, PRE-HEAT COIL, FINAL FILTER, AND REHEAT COIL.
 2. STEAM SHORT ABSORPTION GRID FOR HUMIDIFICATION. CONDENSATE/STEAM HEADER 18" AFF. BLANK OFF UNUSED AREAS AROUND GRID.
 3. PROVIDE 12" INTERMEDIATE STAINLESS STEEL DRAIN PAN.
 4. 12'-0"x8'-0" PLENUM SUPPLY FAN ARRAY WITH INDIVIDUAL UPSTREAM BACKDRAFT DAMPERS.
 5. 30" WIDE ACCESS DOOR WITH 12"x12" WINDOW. (2) DOUBLE SIDED CAM LOCK TYPE HANDLES.
 6. LOCATION OF SUPPLY FAN VFD'S. EACH VFD CONTROLS 50% OF THE FAN AND SPEED OF OPERATION OF THE MAXIMUM DESIGN AIRFLOW RATE. DIVISION 23 CONTRACTOR RESPONSIBLE FOR VFD'S. DIVISION 26 CONTRACTOR RESPONSIBLE FOR POWER WIRING BETWEEN VFD'S AND FANS. SINGLE DISCONNECT BY VFD'S. PROVIDE MOUNTING LOCATION SUCH THAT VFD IS NOT MOUNTED BENEATH WATER/STEAM PIPING OR DUCTWORK. PROVIDE CODE REQUIRED CLEARANCE IN FRONT OF VFD.
 7. PROVIDE NEW COOLING COIL CONDENSATE PIPE PENETRATION FOR COOLING COIL CONDENSATE DRAIN PAN. SEAL AROUND PIPES TO BE AIR TIGHT.
 8. PROVIDE STEAM/CONDENSATE PIPE PENETRATIONS FOR HUMIDIFICATION GRID. SEAL AROUND PIPES TO BE AIR TIGHT.
 9. PROVIDE NEW CHILLED WATER PIPE PENETRATIONS FOR COOLING COIL. SEAL AROUND PIPES TO BE AIR TIGHT.
 10. PROVIDE NEW STAINLESS STEEL DOUBLE SLOPING DRAIN PAN FOR NEW COOLING COIL BANK AND HUMIDIFIER GRID. INSTALL DIRECTLY ON TOP OF EXISTING AHU FLOOR AND SEAL PERIMETER WATER TIGHT. PROVIDE PROPER BRACING BENEATH PAN TO WITHSTAND THE WEIGHT OF MAINTENANCE PERSONNEL.
 11. PROVIDE MARINE STYLE LIGHTS LOCATED IN EACH SECTION. A SWITCH SHALL CONTROL THE LIGHTS IN EACH COMPARTMENT WITH PILOT MOUNTED OUTSIDE THE PERSPECTIVE COMPARTMENT ACCESS DOOR.
 12. EXISTING REMOVABLE PANEL TO REMAIN. SEAL DOOR TO PERMANENTLY BE CLOSED. PROVIDE SIGN "DOOR TO REMAIN CLOSED."
 13. REPLACE EXISTING PNEUMATIC ACTUATORS AND VALVES WITH NEW DDC VALVES AND ACTUATORS FOR EXISTING PRE-HEAT COIL, ENERGY RECOVERY COIL, REHEAT COIL.
 14. PROVIDE AND INSTALL GALVANIZED SHEET METAL PANELS OVER THE EXISTING PERFORATED SHEET METAL PANELS IN THE FAN SECTION OF THE AIR HANDLING UNIT. METAL PANELS SHALL BE SEALED SO AS TO PREVENT MOISTURE FROM ENTERING THE INTERIOR OF THE METAL PANEL WALLS. PROVIDE OVERLAPPING GASKETED STRIPS OR OTHER APPROVED METHOD OF SEALING. CAULKING WILL NOT BE CONSIDERED ACCEPTABLE. EXTENT OF PANELS SHALL BE FROM THE OUTLET OF THE PRE-HEAT COIL TO THE LOCATION OF THE EXISTING HUMIDIFIER. CONTRACTOR TO DETERMINE WHETHER AN ADDITIONAL SHUTDOWN IS REQUIRED TO INSTALL THE PANELS.
 15. COAT EXISTING FLOORING WITH RUST INHIBITOR AND SEALANT WHERE SIGNIFICANT RUST IS EXPOSED INSIDE THE AHU. ALL PRODUCTS SHALL BE USED, AND PRODUCTS SHALL DRY AND OFF-GAS SUCH THAT THERE IS NO SIGNIFICANT ODOR WHEN THE AHU IS RETURNED TO SERVICE.

- GENERAL NOTES:**
- A. PROVIDE NEW DDC CONTROL SENSORS FOR EACH CONTROL POINT ON THE UNIT. WHERE NEW COMPONENTS REMAINING, CONTRACTOR TO TURNED OVER ALL EXISTING TEMPERATURE SENSORS TO OWNER.

- KEY NOTES:**
1. PRE-HEAT COIL, PRE-FILTER, ENERGY RECOVERY COIL, REHEAT COIL AND FINAL FILTER TO REMAIN.
 2. DEMOLISH SUPPLY FAN AND ASSOCIATED FRAME AND VFD.
 3. DEMOLISH DIFFUSION PLATE.
 4. DEMOLISH SOUND ATTENUATION.
 5. DEMOLISH HUMIDIFIER WAND AND PIPING WITH IN UNIT. SEAL CASING PENETRATIONS WITH LIKE MATERIALS TO BE AIR TIGHT.
 6. DEMOLISH COILING COIL, PAN, AND PIPING WITH IN UNIT. SEAL CASING PENETRATIONS WITH LIKE MATERIALS TO BE AIR TIGHT.
 7. DEMOLISH DOOR AND REPLACE WITH DOUBLE WALL INSULATED PANEL WITH LIKE MATERIALS. SEAL SEAMS AIR TIGHT.
 8. REMOVE EXISTING LIGHT AND ASSOCIATED ELECTRICAL WIRING.
 9. CAP HUMIDIFIER AND COILING COIL FLOOR DRAIN PAN WITHIN UNIT AT FLOOR AND OUTSIDE OF UNIT. DEMOLISH DRAIN PIPING OUTSIDE OF UNIT.
 10. DEMOLISH EXISTING BAFFLE PLATE.
 11. REMOVABLE PANEL FACILITATE MOTOR REMOVAL TO REMAIN.

- KEY NOTES:**
1. PROVIDE NEW 304C STAINLESS STEEL DOUBLE SLOPED INTERMEDIATE DRAIN PAN UPSTREAM AND DOWNSTREAM OF THE NEW TOP COOLING COIL. SIZE OF NEW PAN TO EQUAL SIZE OF REMOVED PAN.
 2. REMOVE PORTIONS OF THE ACCESS SECTION FLOOR TO REMOVE EXISTING AREA DRAIN PIPING. REINSTALL NEW WELDED PIPING OF EQUAL SIZE TO EXISTING CONDENSATE PIPING TO ENSURE SYSTEM IS AIR AND WATER TIGHT.
 3. PROVIDE NEW 304C STAINLESS STEEL DOUBLE SLOPING DRAIN PAN FOR AHU FLOOR OF ACCESS SECTION NOT PROTECTED BY THE COOLING COIL CONDENSATE DRAIN PAN. CONNECT TO NEW DRAIN PIPING. INSTALL PAN DIRECTLY ON TOP OF EXISTING AHU FLOOR UNLESS ADDITIONAL BRACING BENEATH PAN IS REQUIRED TO WITHSTAND THE WEIGHT OF MAINTENANCE PERSONNEL. PROVIDE 3 INCH LIP AROUND PAN. SEAL ENTIRE PERIMETER OF PAN WATER TIGHT.
 4. PROVIDE NEW CONDENSATE TRAP PER DETAIL ON THIS DRAWING.



5 COOLING COIL CONDENSATE DRAIN PAN DETAIL 1/4" = 1'-0"

100% CD ISSUE
FULLY SPRINKLERED

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